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Telecommunications

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ANGOLA

ADB Grants \$70 Million for Telecommunications System

*MB0808195490 Luanda ANGOP in Portuguese
1920 GMT 8 Aug 90*

[Text] Abidjan, 8/8 (ANGOP)—The African Development Bank [ADB] has given Angola a credit of \$70 million for investment in the national telecommunications system. Angolan diplomatic source revealed this in Luanda today. The agreement was signed in Abidjan, Ivory Coast, by Amilcar Silva and Sangowana, deputy governors of the Angolan National Bank and the ADB. This sum, added to the \$20 million from France's Central Bank for Economic Cooperation, is aimed at extending television signal to the whole country via satellite. The loan is repayable in 20 years with a 5-year grace period and a 7.5 percent interest rate.

MOZAMBIQUE

Telecommunications Company Signs Agreement with France

*MB0808143890 Maputo in English to Southern Africa
1100 GMT 8 Aug 90*

[Text] The Mozambican state-owned telecommunications company, TDM, yesterday signed in Maputo contracts with two French companies, (Telespace) and (Socacom). The contracts are valued at 1.2 million French francs, just about \$19 million.

They cover the supply and installation of satellite earth stations in the five Mozambican cities of Nacala, Cuamba, and Tete in the north of the country; Quelimane in the center; and Inhambane in the south.

Also included are manpower training and technical assistance for implementing an automatic management system for the subscriber network. The contracts are financed by the French government through its Caisse Centrale de Cooperation Economique.

The director general of Mozambique's Telecommunications, Rui Fernandes, signed for his company, while the deputy president of (Telespace), (Guysome Marrel) signed for his.

NIGERIA

Air Force Installs Radio Station at Calabar

*AB0408070890 Lagos Domestic Service in English
2100 GMT 3 Aug 90*

[Text] The Nigerian Air Force has installed a radio station in Calabar [words indistinct] the nation's air defense strategy. The commander of the Tactical Air Command, Air Vice Marshall (Anthony Okpere) made this known to newsmen in the Cross River State capital.

He said that Calabar was strategically important in the defense of the nation's petroleum industry.

Commercialization of NITEL Lines Boosts Usage

*90WT0121 Lagos THE AFRICAN GUARDIAN
in English 4 Jun 90 pp 16-17*

[Article by Udemé Ekpo: "Who Owns the Lines?—Private subscribers turn their phones into commercial venture"]

[Text] The Nigerian Telecommunication Limited (NITEL) saw it as a measure of good business when the total number of its subscribers increased from about 250,000 to 350,000 at the end of last year. The optimism later proved to be misplaced. NITEL started clamouring from early this year, when it discovered that its monopolistic position as the sole controller of telephone services nationwide is being threatened by both private and business subscribers who turn round to commercialise their operations. In the process they rob NITEL of funds and subject innocent consumers to exploitations.

Under ownership arrangement, according to NITEL authorities, subscribers are expected to pay N500 for installation, N500 for transfer while reprovision attracts another N500. In addition, private subscribers pay a monthly rental fee of N20 and a refundable deposit of N300 while business subscribers are charged a refundable deposit of N500 and a monthly rental fee of N50. Furthermore, according to officials sources, NITEL charges 90 kobo in a 3 minute local call (call within Lagos), N25 and N22 per minute call to America and Europe. It is also gathered that private subscribers charge between N2 and N5 for local calls and N28 and N35 for calls to America and Europe. At present, official sources maintain that over 250,000 out of a total of about 400,000 registered subscribers in the country have commercialised their operations and that an average operator earns up to N5,000 per month after setting NITEL's bills.

The commercialisation of telephone lines in Nigeria reached its unprecedented height soon after the last 800 percent increase charge by NITEL which is said to have been recommended by the World Bank as part of the conditions for approving a 5-year N6.4 billion telecommunication rehabilitation programme. However, the reasons for the commercialisation of the most private lines are not farfetched. THE AFRICAN GUARDIAN discovered last week that, the increased demand for telephone services in most towns has put pressure on subscribers to place their private lines to the service of the public. As Goodwin Osuala, the manager of a telephone booth at Ojota, Lagos puts it: "My telephone was basically for private use. People were coming here everyday to bother me. I allowed them to make use of it. When their number started to increase, I had to tell them to pay, since I have to settle NITEL bills and pay my landlord. After all I'm not running a humanitarian home."

At any rate, NITEL is not ignorant of this growing demand for telephone services. In the editorial of the latest edition of its in-house journal made available to THE AFRICAN GUARDIAN, NITEL declares that by far the dominant and most demanded of its services is the telephone for both private and business usage. But regretted that most consumers would have to do without having lines for the next 1 or 2 decades, because of the present low capacity of about 400,000 lines in the nation's network in relation to an estimated national population of 100 million.

In spite of their glaring huge charges and poor facilities, a visit to most parts of Lagos shows however, that services offered by private subscribers still attract mass patronage. Last week on Morocco road, Shomolu, Lagos, customers were seen in queues in private houses waiting to make calls. At Akpata bus-stop which is located within the same vicinity, Mr Tunde Yinka, a customer who was making a call in one of the shops, said "it is not that we enjoy coming out here to be exploited by these people (private subscribers) but we don't have a choice. I applied for the telephone 5 months ago, till now I have not been allocated a line."

At Herbert Macaulay Road, Yaba, Lagos, Mr Joseph Badejo a private subscriber also explains that most people patronise private subscribers because of their accessibility to the public. He maintains that subscribers make use of their shops, rooms and stores to put their telephone services at the door-step of customers while NITEL booths and calling stations are far removed from the reach of the people. Citing the example of a customer who spent more than N7 to travel from Lagos mainland to Falomo in the Lagos Island area to make a call, a private subscriber queried: "Why should NITEL hope to win people's patronage when its service is not within their reach?" It was also gathered that most private subscribers have good human relations. Observers believe such human relations attract customers.

Despite its popularity, the public relations manager of NITEL, Mr Osagie Ayanru last week said that "such operation is illegal as NITEL is the only authorised body by the law to provide telephone services in the country." He said NITEL is very much bitter about such attempts to circumvent that authority, but concluded that as at now it has not mapped out any strategy of dealing with the situation. He however lamented that it is the masses

that are suffering since they are mercilessly exploited by these operators as he puts it: "We are less affected, after all, they pay what we tell them to pay." However, Mr Friday George, a public relations officer in the same organisation views the matter differently. He believes that NITEL loses reasonable sum of money to the subscribers since they pay less as private operators and later turn round to commercialise their services.

Be that as it may, most commercial subscribers believe there is nothing illegal about their operation. Mr Godwin Taiwe whose telephone booth is located at chemist bus stop, Akoka, Lagos, wondered "what is wrong in allowing people to make use of your telephone and collect money from them? It is as good as you making use of the service yourself." However, an official of NITEL said such argument does not seem logical since it is obvious that if these operations had indicted in their application forms that they would use such lines for commercial purposes, their applications would not have been considered in the first place.

For now, it appears timely installation of more calling centres by NITEL would free Nigerians from the exploitation of private telephone subscribers.

TANZANIA

Zanzibar Radio To Build Studio With Chinese Aid

EA0508212590 Zanzibar Domestic Service in Swahili
1200 GMT 5 Aug 90

[Text] Preparations for the construction of a new broadcasting studio for Radio Tanzania, Zanzibar, are continuing here at Raha Leo [in Zanzibar town]. The director of the Department of Information, Broadcasting and Television, Comrade Yusuf Omar Chunda, said that expert technicians from China who have already arrived in Zanzibar are continuing with the work of preliminary preparations, including the clearing of the site where the studio will be built.

The actual construction of the new broadcasting studio, which is to start at the beginning of September this year, will cost about 457,200,000 shillings. The construction, which will last for 20 months, will be financed with a soft loan from the Chinese Government.

First Inter-Provincial Fiber-Optic Line Operational

90P60033 Beijing JISUANJI SHIJIE [CHINA COMPUTER WORLD] in Chinese No 27, 11 Jul 90 p 1

[Article by Xin Long [2450 7893]]

[Text] China's first inter-provincial optical communications system—the Hangzhou-Jiaxing-Suzhou Digital Optical Communications Project—is now operational. This project, jointly funded and built by the posts and telecommunications authorities of Jiangsu and Zhejiang Provinces, was recently put into full use after 2 years of construction. Throughout the system, 181.2 kilometers in total length, engineers have employed domestically made fiber-optic cable and transmission equipment provided by Wuhan Institute of Posts & Telecommunications Science; this equipment includes a 34 Megabit/second single-mode long-wavelength DS3 [480 voice circuits] system. In the project, engineers used the $n + 1$ inversion mode and used computers to cross-connect the digital segments for complete [computer] monitoring and control—a pioneering technique for this nation.

Feature on Wuhan Institute of Posts & Telecommunications Science

90P60029 Beijing KEJI RIBAO [SCIENCE AND TECHNOLOGY DAILY] in Chinese 7 Jul 90 p 2

[Article by Yang Yuankui [2799 0337 7608]: "Tracking the World State-of-the-Art in New High-Tech Areas: Wuhan Institute of Posts & Telecommunications Science Becoming Major Base for Fiber-Optic Communications"]

[Summary] The Wuhan Institute of Posts & Telecommunications Science (WIPTS) is rapidly becoming the nation's premier research institute for fiber-optic communications. Over the past few years, the institute has achieved results in 101 projects, many of them key S&T projects of the State's Seventh 5-Year Plan and the corresponding plan of the Ministry of Posts & Telecommunications (MPT). In 1989 alone, the institute received 72 awards from MPT for S&T advancement. In the main technical areas of fiber-optic communications, WIPTS has reached or approached the world state-of-the-art. Examples include the institutes's development of a laser diode assembly with an operating lifetime that has broken through the 100,000-hour barrier; one type of laser chip has an experimental lifetime of 250,000 hours. The institute's yield (or proportion of products passing inspection) for single-mode optical fiber has grown from 40 percent in 1985 to 62 percent in 1989, and yield for free single-mode fiber-optic connectors has exceeded 90 percent.

One of the institute's areas of specialization is renovation and development of overhead fiber-optic cable systems, for which the institute can now supply complete

sets of equipment as well as technological services. Using this technique, WIPTS has saved an estimated 2 billion yuan in renovating the nation's 180,000-kilometer system of intra-provincial second-level [DS2, 8Mbps, 120 voice circuits] communications trunklines. Some of the projects utilizing WIPTS products and services include China's first domestically manufactured long-distance fiber-optic line (Wuhan to Jingzhou, 244.8 km), China's first single-mode fiber-optic trunkline (Yangzhou to Gaoyou [Jiangsu Province], 75 km), and China's first domestically made metropolitan telephone repeater fiber-optic communications line (Hanyang to Hannan, 36 km).

WIPTS is currently in the midst of a major expansion. Technology-related revenues have reached 4.5 million yuan. The Wuhan Telecommunications Devices Corporation, a joint venture between the institute and a U.S. firm, now provides the most advanced optoelectronic devices in China—devices of a quality sufficient to replace imports. Together with the Wuhan Municipal government, WIPTS has also formed a joint venture with the Netherlands' Philips: Changfei [7022 7378] Optical Fiber and Fiber-Optic Cable, Ltd.

Earth Station To Go Into Operation in Shandong

OW0808150590 Beijing XINHUA in English
1359 GMT 8 Aug 90

[Text] Jian, August 8 (XINHUA)—The rapid development of telecommunications facilities in east China's Shandong Province in the past three years has boosted economic development and external relations.

The province has invested 700 million yuan to improve its telecommunications facilities. All counties and cities in coastal economic open areas now have automatic telephones. Shandong's major cities—Jinan, Qingdao, Zibo, Weifang, and Yantai—now have 24 hour international long-distance telephone service which has greatly improved communications with Hong Kong, Macao, and foreign countries.

During this year and next year, microwave equipment, microwave circuits, program-controlled telephones and mobile telecommunications systems will be set up in various parts of Shandong. The Qingdao satellite earth Station will also go into operation.

Noted Specialist Calls For Governmental Establishment of Research Center for Fiber-Optic Communications

90P60027 Beijing KEJI RIBAO [SCIENCE AND TECHNOLOGY DAILY] in Chinese 21 Jun 90 p 1

[Article by Jing Zhaoyu [5427 2600 3254]: "Noted Fiber-Optics Specialist Professor Ye Peida Recommends: Government Should Set Up as Quickly as Possible an Advanced Fiber-Optic Communications Research Center"]

[Summary] Beijing, 20 Jun—With China's theoretical basic research in fiber-optic communications lagging behind the world standard by approximately 5 years, and actual production and operational capacity lagging by about 10 years, noted Chinese fiber optics specialist Professor Ye Peida [0673 1014 1129] has called upon the government to establish as soon as possible an advanced fiber-optic communications research center. Professor Ye, who is a member of the Chinese Academy of Sciences' Academic Commission and honorary director of the Beijing Institute of Posts & Telecommunications (BIPT), made these remarks at the recently inaugurated International Communications Technology Conference. The 75-year-old professor specified that, before the year 2000, all efforts should be made in the following three areas. First of all, the experiments now being conducted at a BIPT laboratory in high-capacity coherent fiber-optic communications should be completed, and the schedule for on-site tests should be moved up. Secondly, based on the two main fiber-optic-cable trunkline networks now being constructed in China—the [2200-kilometer-long] Nanjing-Wuhan-Chongqing line running east to west, and the Beijing-Wuhan-Guangzhou line running north to south—a fiber-optic network linking all of China's principal cities should be completed. Simultaneously, research into photonic switching systems for broadband fiber-optic-cable network correspondence should be vigorously promoted. Thirdly, attention should be paid to monitor technological advances in fiber optics, most importantly in the area of optical [circuit] integration and optoelectronic integration. The professor concluded by commenting that, if an advanced research center is set up soon, this three-part plan may be implemented by the year 2000.

Value-Added Services To Be Provided for INTELSAT Network Data

90P60024 Beijing HANGKONG ZHISHI
[AEROSPACE KNOWLEDGE] in Chinese No 6,
Jun 90 p 5

[Unsigned article: "China to Open Up Value-Added Services for Data on International Satellite Communications Network"]

[Summary] Shanghai is the first city on the Chinese mainland to provide electronic mailbox services, to be targeted primarily toward the foreign commercial firms and investment firms set up in Shanghai. This information was disclosed at the International Satellite Communications Network's Shanghai Economic Region press conference held on 18 April in Shanghai. According to a spokesman for the Asian-Pacific Region of the International Satellite Communications Corporation, China's Ministry of Posts & Telecommunications has agreed in principle to provide the Chinese mainland with value-added services from INTELSAT network data, and to establish testing and promotion facilities in Shanghai for the first electronic mailbox users. The spokesman further revealed that many international firms are hoping to set up organizations, investment enterprises, and partnerships in China to enter the market for INTELSAT network-system value-added services such as information transmission, processing, storage, interchange, and concentration. Especially significant is the service known as the electronic mailbox, which provides a simple and secure means of information transmission to those with a portable computer: information can be received or transmitted to any telex (teletype) or FAX machine anywhere in the world, as well as to all electronic mailbox users.

INDONESIA

New Zealand TV Station Leases Palapa Transponder

BK0808074790 Jakarta ANTARA in English 0634 GMT 8 Aug 90

[Text] Bandung (West Java), August 8 (OANA-ANTARA) - New Zealand's television system has hired a transponder of Indonesia's Palapa B-2R satellite for five years.

The lease was signed in Jakarta at the end of last July by Director of Operation Purwo [one-word name] representing Perumtel, the state telecommunication company, and John Green, project manager, representing New Zealand's television system respectively, Perumtel's spokesman Mohamed Gempita told ANTARA on Wednesday [8 August].

According to Gempita, New Zealand hires transponder no. 6-H of Palapa B-2R satellite for five years, paying an annual rent of 750,000 U.S. dollars.

Besides New Zealand and Indonesia's own TVRI [Television of Republic of Indonesia], several other countries are currently also using Indonesia's Palapa satellite for their television broadcasts, among others Malaysia, Thailand, and the Philippines.

Commercial TV Stations Planned for 27 Cities

BK1108153090 Hong Kong AFP in English 1409 GMT 11 Aug 90

[Text] Jakarta, Aug 11 (AFP)—Indonesia has decided to allow local investors to set up commercial television stations in all 27 provincial cities, the official ANTARA News Agency reported Saturday.

Only one commercial station will be allowed per city and the broadcast range would be limited to the city and its surroundings, ANTARA quoted Information Ministry officials as saying.

A company connected with the son of President Suharto opened the first commercial network in Jakarta two years ago. Since then, the government has licensed companies to operate in Indonesia's second largest city Surabaya, the west Java city of Bandung and the Bali capital Denpasar.

The four cities are the most lucrative in commercial terms but sources in the advertising industry said several other cities, such as Medan in north Sumatra and Semarang in central Java, are also promising markets.

The state television TVRI has the sole the right to broadcast nationwide in this archipelago nation of some 184 million people. It does not carry advertising but receives royalties from commercial stations.

SOUTH KOREA

More Telephones Planned for ROK by 1991

SK0408001790 Seoul THE KOREA TIMES in English 4 Aug 90 p 3

[Text] Korea plans to install 2.68 million more telephone lines next year, bringing the total number to 17,600,000 or 36 telephones per 100 people by 1991, the Korea Telecommunication authority announced yesterday.

The additional lines projected for 1991 will be comprised of 1.53 million units of the TDX-1B system, 63,000 of TDX-1A, 72,000 of TDX-10, 912,000 of imported systems such as 5ESS system and 102,000 of AXE-10.

MALAYSIA

Telecommunications Accord Signed With Singapore

BK0708172290 Kuala Lumpur BERNAMA in English 0829 GMT 7 Aug 90

[By Syed Imran Alsagoff]

[Text] Singapore, Aug 7 (BERNAMA)—Malaysia's privatised Telecoms company, Syarikat Telekom Malaysia (STM), and Singapore Telecoms Tuesday [7 August] signed a memorandum of understanding (MOU) which will pave the way for upgrading telecommunication links between the two countries.

Both sides also agreed to use circuits on a new digital microwave link and establish an optical fibre land line between Singapore and Johor Baharu, capital of the southern Johor state.

Speaking at the signing ceremony at the Singapore Telecom's Comcentre here, STM Executive Chairman Mohamed Rashdan Baba said the MOU symbolised the importance STM placed on Singapore Telecoms as a partner in its international business.

He added that the implementation of digital links will facilitate the introduction of new services to help customers operate more effectively in both countries.

Rashdan said that Singapore remained the top destination for outgoing telephone calls from Malaysia.

Singapore Telecoms Chairman Kok Boon Hwee said as demand for telecommunications increased, it is imperative that both organisations are prepared to meet the needs of customers by expanding their links.

The digital microwave link is expected to be commissioned before the end of this year, meaning better quality and service for customers, he added.

On its part, Singapore Telecoms will invest about Singapore \$2.4 million on the digital microwave link and optical fibre land line projects.

Another project under the MOU is the setting up of a mobile service link for handphone subscribers. A study is being carried out and the service is likely to be ready either by the end of this year or early next year.

The MOU was signed on behalf of Singapore Telecoms by Kok and its president and chief executive officer, Wong Hung Khim, while STM was represented by Rashdan and Dr. Syed Hussein Mohamed, the executive director.

VIETNAM

Khmer-Language Radio Program To Be Broadcast

*BK0408170790 Hanoi Domestic Service in Vietnamese
1100 GMT 1 Aug 90*

[Excerpt] Beginning today, 1 August 1990, Voice of Vietnam Radio will broadcast a Khmer-language program for Khmer compatriots in the Nam Bo region. This

is the second ethnic language program to be broadcast by the National Radio Broadcasting Station following its first one, a H'mong-language program, which has gone into the air since 1 April this year.

The program for the Nam Bo Khmer compatriots is to be broadcast from Ho Chi Minh city over the frequency of 455 khz or 458 meters. There are two broadcasts a day with the morning broadcast starting from 0500-0530 hours and the evening starting from 2000-2030 hours.

The purpose of this program is to keep the Khmer compatriots informed of activities regarding national construction and defense and the world situation with special emphasis on the economic, cultural, and social life of the Khmer compatriots in the community of multiethnic Vietnamese people. This program also serves as a forum of the Nam Bo Khmer compatriots. [passage omitted]

BOLIVIA

Paz' State of Nation Address Includes Plans for Telecommunications

PY0708221490 La Paz Television Boliviana Network in Spanish 1945 GMT 6 Aug 90

[President Jaime Paz Zamora's state-of-the-nation address on the occasion of a new National Congress session and Bolivia's Independence Day]

[Excerpts] [passage omitted]

As the Bolivian economic policy has become internationally respected, as a result of the seriousness with which it is handled, Bolivia has been successful in obtaining foreign credit. During my first year in office, the international financial community comprising the Paris Club promised, in October 1989, to approve loans and donations for an overall total of \$750 million a year. These funds are meant to finance economic and social development programs and projects. The additional funds to finance the replacement crops programs, which are the immediate result of presidential efforts, must be added to the funds obtained from the Paris Club.

We must point out that, among other countries, Spain has promised \$60-million donations for the next few years and \$125 million in loans to be granted in the next 18 months. Italy has placed at the disposal of the Bolivian Government a \$100-million concessional credit. The United States has increased to \$150 million its financial assistance to Bolivia for the fiscal year that begins in September 1990 and ends in August 1991. If we add all these figures, the promised credit and donations total \$900 million to \$1 billion a year. It is now in the hands of the Bolivians—in our hands—to ensure that these funds are used in projects that may benefit the country. [passage omitted]

In modern days, integration is also achieved through electronic means and telecommunications. To this extent, we have dedicated the central ground station of the Domsat-Bolivia project, which ensured the first via-satellite television transmission in Bolivia. This project's first remote-station, which was recently dedicated in the town of Cobija, is one of 13 stations to be constructed this year in other parts of the country. There will be similar remote stations reaching southern settlements such as Bermejo in addition to those contemplated in the Sovereignty Plan. This system will allow us to send television signals nationwide. It will also render

telephone services, data transmission services, telex services, and facsimile services to rural areas. With the digital telephone trunk-net we will expand the range, and improve the quality of national and international long distance calls. The expansion project for ENT, National Telecommunications Network, [as heard] foresees the installation of telecommunications infrastructure with the modern digital system in southwest Bolivia. Central stations will be installed in La Paz, Cochabamba, and Santa Cruz. These stations will be linked to the Chilean and Brazilian centrals, thus connecting the Atlantic and Pacific coasts of the Latin American Continent. We will double the capacity of the international-transit central of La Paz. The Santa Cruz ground station, which is under construction, will be connected to the Tihuanco station, which will be expanded, thus granting us speedy communications with the other countries.

Along a 700-km line, we are installing a digital communication system that will cover the area between Santa Cruz and Puerto Suarez. These two cities will soon have telephone, telex, fax, television, and radio services, which will create further links among Bolivians. [passage omitted]

CUBA

Communications Minister Inaugurates Land Station

FL1108003390 Havana Radio Rebelde Network in Spanish 2310 GMT 10 Aug 90

[From the "Exclusivo" program]

[Text] Communications Minister Manuel Castillo Rebasa today inaugurated the land station for satellite transmissions that will help establish, through Rome, international communications—the largest system in the Antilles—with about 40 countries from every continent.

This station, similar to the one inaugurated last month in Varadero, has 24 international channels which will allow users to connect with 180 trunks providing dialing, direct, and automatic service to embassies, enterprises, and the tourism sector.

Upon inaugurating the modern technology, Castillo Rebasa explained his satisfaction with the good work done by the Cuban and Italian technicians who made this project possible. It will be expanded with the use of other portable land stations in Cayo Largo, Holguin, and Santiago de Cuba.

BANGLADESH**Latest Telephoto Technology Introduced in Bangladesh**

90WD0501 Dhaka THE BANGLADESH OBSERVER
in English 9 Jun 90 p 10

[Text] THE UNITED NEWS OF BANGLADESH (UNB) in collaboration with AGENCE FRANCE-PRESS (AFP)—the Paris-based international wire service Friday started receiving day's pictures in a day through the latest telephoto technology reports UNB.

The reception of telephotos through a "dish antenna," first time in Bangladesh, began hours before Friday's opening match of the world cup football pageantry that got off in Milan, Italy.

With the introduction of the telephotos, UNB—the country's first computerised news agency, will be able to distribute world cup pictures among the Bangladesh newspapers the same day within hours of each match.

UNB has made special arrangements with AFP for extensive coverage of the world cup.

The new telephoto service introduced by AFP will bring home to UNB and through it to the Bangladeshi newspapers news pictures from anywhere of the world the same day.

UNB which already has agreement with AFP for exclusive distribution of pictures in Bangladesh, had so far been receiving photos by mail.

INDIA**Minister Rules Out Privatization of Electronic Media**

BK2407093990 Delhi Domestic Service in English
0830 GMT 24 Jul 90

[Text] The information and broadcasting minister, Mr. P. Upendra, has made it clear that the proposed Prasar Bharati Corporation [Broadcasting Corporation of India] will be funded by the government and there is no scope for privatization. The Prasar Bharati bill only aims at freeing the electronic media from the shackles of the government, but it does not mean that the state should abdicate its responsibility and allow the media to fall into the clutches of the industrialists. The proposed corporation, he said, will remain fully answerable to parliament. The minister was addressing the joint session of station directors of All India Radio and Doordarshan in New Delhi today.

IRAN**New Satellite Transmitter Station Starts Operations**

LD1108174290 Tehran Domestic Service in Persian
1630 GMT 11 Aug 90

[Text] As a result of efforts by employees of the Islamic Republic of Iran Voice and Vision Television and FM transmission division's maintenance unit—Ardabil Center—the Mardan-e Qom satellite station in Kalibar's Khodaafarin district has begun operating with a 10-watt transmitter.

The Central News Unit reports that the transmission will enable some of the villages in the border regions to see the programs of Iran Vision's first channel on channel six.

IRAQ**INA Reports Canceling KUNA As of Unity Declaration****Text of Circular**

JN1008195490 Baghdad INA in Arabic 1858 GMT
10 Aug 90

[Text] Baghdad, 10 Aug (INA)—INA announced today that the KUWAIT NEWS AGENCY [KUNA] has been canceled, and that all its offices abroad no longer have any official or press tasks, regardless of the nature of these tasks.

In a circular distributed to all managers and editors of friendly and brotherly news agencies, INA has pointed out that as of the declaration of the complete merger unity on 8 August 1990, the tasks carried out by the offices and correspondents are no longer valid, and are null and void.

Following is the text of the circular:

Colleagues, managers and chief editors of Arab and friendly news agencies in the world. Our best greetings to you and to all of our dear colleagues.

Following the establishment of the complete merger unity between Iraq and Kuwait on 8 August 1990, we are pleased to tell you that KUNA has been canceled, and that all its offices abroad have no longer any official or press tasks, regardless of the nature of these tasks.

According to the aforesaid, INA would like to inform you that, as of the declaration of the complete merger unity on 8 August 1990, the tasks and missions undertaken by these offices or their correspondents are no longer valid, and are considered null and void.

We would like to take this opportunity to express to you our great appreciation for the existing cooperation between us. We wish you success.

KUNA, AL-QABAS To Operate From London

*NC1108121090 (Clandestine) Radio Free Lebanon
in Arabic 1045 GMT 11 Aug 90*

[Text] Kuwaiti media sources today disclosed that KUNA will very soon resume its transmission from London. The sources said that the Kuwaiti newspaper AL-QABAS is setting up offices in London, to prepare to begin publishing from there.

Meanwhile, Kuwaiti political sources have said that all the Kuwaiti newspapers will soon restart operations at various foreign capitals.

PAKISTAN

**Space Agency To Set Up System for Aerial
'Mishaps'**

*BK1008145090 Islamabad Domestic Service in Urdu
1400 GMT 10 Aug 90*

[Text] Pakistan's Space and Upper Atmospheric Research Commission [SUPARCO] will set up a system using communication satellites to quickly spot the site of aerial or navigational mishaps and provide immediate relief measures.

Radio Pakistan's Karachi correspondent understands that this system will make it easy to locate the sites of mishaps through communication satellites orbiting at low altitudes. For this purpose, a piece of equipment called a (Baker) will be fitted to the aircraft and ships. SUPARCO is setting up a center in Lahore to receive messages from these ill-fated aircraft and ships.

Molniya-1 Satellite Launched 11 Aug**To Ensure Telephone, Telex Communication***LD1308092990 Moscow Domestic Service in Russian
0900 GMT 13 Aug 90*

[Text] On 11 August another Molniya-1 communication satellite was launched in the USSR. It is designed to ensure the exploitation of distant telephone and telex [telegrafnyy] radio communication systems and also to transmit USSR Central Television programs to places connected to the Orbita network. Communication sessions will be held via the satellite according to schedule.

Satellite Parameters Listed*LD1308101890 Moscow TASS in English 1012 GMT
13 Aug 90*

[Text] Moscow August 13 TASS—A communications satellite was launched by a Molniya booster rocket in the Soviet Union on Saturday, it was officially announced here.

The satellite, Molniya-1, is intended to ensure telephone and telegraph radio communication and to transmit Soviet television programmes to points covered by the Orbita television network.

The satellite was placed into a high elliptic orbit with an apogee of 40,634 kilometers in the northern hemisphere and a perigee of 646 kilometers in the southern hemisphere.

The period of the satellite's revolution is 12 hours 16 minutes. The orbit inclination is 62.7 degrees.

Communication via the satellite will be carried out in accordance with a preset programme.

'Echo of Moscow' Radio to Start Broadcasting in Late Aug*LD1208095190 Moscow Domestic Service in Russian
0900 GMT 12 Aug 90*

[Text] The new radio station Ekho Moskvyy [Echo Moscow] will start broadcasting at the end of the month, between 20 and 30 of August. The radio station will operate on medium wave on the Mayak band.

'Independent' Television Foreseen*LD0508202190 Moscow Domestic Service in Russian
1419 GMT 5 Aug 90*

[Excerpt] [Presenter Aleksey Yermilov] At the end of last week—to be more precise, on Friday—a new public organization, in fact an entire union of organizations, took its place in our country. It is the Union of Cable TV organizations. I attended the inaugural congress of this union. It was held at the Ostankino concert studio, next door to us, and lasted three days. The preparation of the congress took a lot of time, as I was told on the last day of the congress by (Vitaliy Vasilyevich Rashko), the

chairman of the organizing committee, who spoke to me in the foyer after the meeting was over.

[Begin recording][Rashke] Yes, the organizing committee spent four months setting it up. We did not hurry. We wanted to make sure that everything was done properly and that democratic documents were adopted. Now the rules have been adopted. A president has been elected. He is Eduard Mikhaylovich Sagalaye, a broadcaster and television personality who is well known to everybody in his capacity as editor in chief of the Vremya news program. [passage omitted]

[Sagalaye] It seems to me that if the State committee for Television and Radio Broadcasting—Gosteleradio—or the USSR Communications ministry try to resist this logical development of events, they will not be doing themselves any good even though that could slow down the development of the cable network to a certain extent. I do not think we should have any illusions. Until a market economy and a market in ideas are set up in this country, we will not be getting any presents from any kindly uncle. Bureaucracy can destroy any project, either in an open struggle or in a smothering embrace. Only by uniting our ranks can we ourselves forge our own happiness, so to speak.

What does this happiness consist of? Cable and broadcast TV exist in many forms. This is an indispensable condition for the existence of the union. There must not, it seems to me, be any dictatorship or discrimination in favour of one form at the expense of others. All forms must develop. If a rayon TV studio exists somewhere, let it be. That's wonderful. If video cassettes are being produced somewhere, let that continue. That's wonderful. The important thing is that all this should be beneficial to society, and that it should all take place within the context of the constitution and civilized behavior.

[Yermilov] Some people think that Gosteleradio may crush all its rivals, including the cable network and simply deprive them of the economic and technical facilities they need.

[Sagalaye] Well, Gosteleradio has set up its own technical production association for cable TV. As far as I am aware, it is not intending to crush competitors. Here we have to seek the best possible combination of interests. I think it is premature to be fearful of the future simply because this is Gosteleradio, a state organization. Let's wait and see what steps Gosteleradio will take. Maybe we will find out that it's a friend, comrade, companion, colleague, partner, and so on.

[passage omitted: Yermilov asks how the output of cable TV can be controlled. Sagalaye says there is no need for control. The market will provide all the control that is needed. Other delegates join the debate and suggest that if subscribers don't like the programs, they will switch off or complain to Sagalaye himself, as Yermilov puts it. Sagalaye hopes that cable TV will provide an opening for intellectual forces, both within the country and outside it.]

[Yermilov] Eduard Mikhaylovich, let me ask you a last question. When you set out your program today, you said that you are currently giving a great deal of attention to alternative TV, as one can probably call it—the studios of the 21st century.

[Sagalayev] What we are talking about is the television company, the joint stock company. One would like the television of the 21st century to be referred to as a channel. Probably it will take the form of a television company, the joint stock company. Only yesterday this question—its legal and political aspects—were discussed at the collegium of Gosteleradio. Everything depends on these aspects, rather than on technical facilities, although that too is of course a most acute question. One is talking about the creation of independent television.

This word "independent" is terribly intimidating, of course. In this country we have quite simply lost the natural understanding of the term "state." We equate the state with the government, for example. This is one of the general defects of our thinking and awareness. Everywhere I go, I am asked: How can anything be independent? That is unrealistic, people say. But now there are fairly solid grounds for thinking that such a step can be taken. And I think it will be taken, again, because the country is heading for a market. I do not think it is very realistic now to assume that the 2.5 billion ruble subsidy which Gosteleradio currently receives will be paid out next year. In a year's time, rather than next year, I should say. This tap will definitely be turned off in some way. So we will have to reconcile ourselves to the fact that TV will have to pay its own way, that there must be competition, and so on and so forth. Everything will happen naturally, just as it happens in life itself.

[Yermilov] Logically.

[Sagalayev] Yes. Here one is talking about very noble objectives.

[Yermilov] The setting up of a separate channel.

[Sagalayev] Yes, this will be a separate channel. It will be as depoliticized as possible. The television viewer has a right to insist that the country have a channel which strives to be independent of all political forces and parties, whose main aim is the lofty idea of enlightening and informing people about what is really happening in the country. [end recording]

Cable, TV Union Formed; Sagalayev Elected President

LD0408023990 Moscow Domestic Service in Russian
1530 GMT 3 Aug 90

[Text] The Union of USSR Cable Broadcast Television Organizaitons [Soyuz organizatsiy kabelnogo i efirnogo televideniya SSSR] has been set up in our country. Its founding congress ended today in the Ostankino concert Studio in Moscow.

Cable television will make it possible not only to expand the range of programs for television receivers but also by using blue screens to find out details about the life of one's home region and, say, participate in an election campaign or a referendum. The new union has been formed to develop this promising area more effectively.

Eduard Sagalayev, editor in chief of the Main News Department of Central Television, has been elected president of this public organization.

Regulations for the Use of Municipal and Rural Telephone Systems

90WT0090 Moscow BYULLETEN NORMATIVNYKH AKTOV MINISTERSTV I VEDOMSTV SSSR
in Russian No 3, Mar 90 (confirmed 22 Mar 1985;
amended and revised 1 Jan 90) pp 16-25

[USSR Ministry of Communications]

[Abstract] The regulations for the use of municipal and rural telephone services are divided into six sections.

Section 1 indicates the responsibilities of the phone company to customers including the procedure for registering complaints.

Section 2 outlines the services provided to customers: installation of private and communal lines at dwellings and enterprises, replacement and repair of equipment, change and listing of phone number, and billing.

Section 3 outlines the conditions for the provision of service and the order of execution. Enterprises are serviced before individuals, and certain categories of individuals (for example, invalids) are serviced before other individuals.

Section 4 lists the conditions of use by the customer. The customer must pay bills promptly, and give one month notice for any change in service. He is prohibited from installing equipment on his own or impeding repairs.

Section 5 outlines the fees for services, payment locations, penalties for nonpayment, and refund policies.

Section 6 lists the order and conditions for provision of service to enterprises, institutions, and organizations, which are very similar to those for individual customers.

'People's TV Studio' Operating in Siberian Town

PM0608132590 Moscow SOVETSKAYA ROSSIYA in Russian 4 Aug 90 First Edition p 1

[A. Shchegolev report: "People's TV Studio"]

[Text] Krasnoyarsk Kray—We had never heard of the existence of such a thing, although we are well aware of what cable or satellite TV is. Now here in the Siberian town of Kodinskiy, on the Angara River, the city soviet executive committee has adopted a decision to set up its own people's TV studio. It already exists and regularly broadcasts for 60-90 minutes.

Council of Ministers Chairman Ryzhkov Interviewed at Exhibition

*LD0708224490 Moscow Domestic Service in Russian
1411 GMT 7 Aug 90*

[Excerpts][Announcer] Comrade Ryzhkov, chairman of the USSR Council of Ministers, familiarized himself today with an exhibition called Conversion - 90 which was organized by the Ministry of Defense Industry, and an exhibition devoted to the state and development of communications facilities at the country's Ministry of Communications. Our special correspondent Tatyana Chemodanova reports:

[Chemodanova] I am at the Institute of Scientific and Technical Information of the Ministry of Defense Industry. On show are medical and consumer equipment, refrigerators, washing and sewing machines, vacuum cleaners, and much else in such short supply today. All this has been produced at plants of our military - industrial complex in the conversion program. The head of the Soviet Government, Nikolay Ivanovich Ryzhkov, following a view of the exhibition, gave an interview specially for the Mayak program. [passage omitted]

[Chemodanova] Nikolay Ivanovich, how will development of communications help the development of Soviet Radio and Television?

[Ryzhkov] I think that what Comrade Pervyshin has just reported—more than a half, if not three quarters pertains specifically to radio and television and it is, in my view, only a third that is directly linked with communications in the old, classical sense—like telephones, the post office, and so forth. That is why the start that has already been made and the mass production of output that is now beginning should, in my view, exert a very serious influence on television.

[Chemodanova] When, realistically, will it be possible for us to increase the number of channels?

[Pervyshin] We have just been looking at a television journalism complex. We have seen a radio relay line which makes it possible to solve all these tasks from further afield. Standing here, too, is a camera of high definition television which we are working on and in 1992 we wish, by our own means, to transmit from Barcelona the Olympic games, using the high definition television. We are working on creating both television and radio broadcasting transmitters. Once two new satellites have been launched, we will be able to make it possible practically for every republic to make, transmit, and receive its own, national program.

[Ryzhkov] This will be next year, isn't that right?

[Pervyshin] We will begin to do it starting next year. As for such areas as Kazakhstan and the central part of Siberia, even with the aid of today's satellites we already intend to help solve this task for these large regions. That is to say, everything we are doing we are doing for radio and television communications. [passage omitted]

[Pervyshin continues] Nikolay Ivanovich, if you please, and indeed you journalists, look at the way in which we are making use of issues connected with conversion. First and foremost we are dealing with industries where the requirement for control systems is not decreasing, it is being slowed down, it is virtually without growth. Our military equipment remains at the current level. We are obtaining the entire gain through the construction of new works that have been envisaged and which we are now redesignating, works that we have built in accordance with the armaments program. We have developed them on the test bench and we are starting to produce them: we will be making mobile communications systems using all radio means both in our own enterprises and jointly with the (?Telenok) firm in Voronezh. [passage omitted]

Gostelradio, Deutsche Welle Sign Accord

Broadcasters, Technical Personnel Exchanges

*LD0708165390 Moscow World Service in English
1500 GMT 7 Aug 90*

[Text] On 7 August the Soviet State Committee for Radio and Television Broadcasting and the Deutsche Welle station of West Germany signed an agreement on radio broadcasting. The signatories will exchange programs in culture, sports, leisure, and other areas of mutual interest. They will give each other all-round assistance in preparation of programs, hold radio link-ups, and record musical programs together. The sides will promote exchanges of broadcasters and technical personnel and also of experts in audience response. The agreement clears the way for long-term exchange programs for young staffers. It was signed by deputy chairman of the Soviet Radio and Television Committee and intendant of Deutsche Welle Dietrich Weirich.

Transmissions to Kazakhstan, German Settlement Areas

*LD0708163390 East Berlin ADN International Service
in German 1422 GMT 7 Aug 90*

[Text] Moscow (ADN)—An agreement on cooperation for an initial period of three years was today signed by the Soviet Committee for Television and Broadcasting and the FRG radio station Deutsche Welle. The document provides for an exchange of programs on a non-commercial basis, mutual support in the production of programs, as well as their joint implementation and other things. Transmissions to Kazakhstan and German settlement areas in the Soviet Union are also planned.

CANADA

Digital Radio Demonstrations Underway

90WT0129 Toronto *THE GLOBE AND MAIL*
in English 7 Jul 90 pp A1, A2

[Article by Mary Gooderham]

[Text] A new kind of radio is making sound waves in the broadcasting business this summer.

Digital radio, now being demonstrated across Canada, is promising distortion-free, "unparalleled sound" for music and information broadcasts—but also the phasing out of the AM and FM radios that are used today.

"I think it's not only technologically feasible, it's absolutely inevitable," said Stephen Edwards, vice-president of corporate engineering and technology for Rogers Broadcasting Ltd., one of the organizers of a demonstration project to promote digital radio.

Many Canadian radio stations have already brought digital technology into their studios with compact disc players, digital audio tape machines and computerized music storage. However, there is no way to send the improved sound to the public through current AM and FM radio transmitting systems.

The new technology transforms sound into digital pulses, processes and encodes them numerically, then transmits them over the air to digital receivers.

One of the largest prices to be paid will be in the form of new equipment. Consumers would have to buy new receivers to pick up the transmissions, although proponents say the cost will come down to conventional radio prices with mass production. Broadcasters say AM and FM radio would be broadcast simultaneously with digital radio for about a decade, then would die.

Broadcasts would not change but would simply be transmitted differently, perhaps picked up as Channel 5 or 6 on a new receiver instead of under the familiar radio call numbers.

Broadcasters favor digital radio because of the improvement in sound quality, the fact that it will mean strong signals for all stations and a number of measures that cut the cost and overhead of today's equipment.

One of the largest attributes is that the new system, which has been developed mostly in Europe, is capable of carrying 16 different stereo programs or stations simultaneously on one transmitter. This means that in many areas a single antenna could replace all existing AM and FM radio transmitters, cutting down on things such as electrical consumption. The efficiency is achieved by special coding techniques that reduce the number of data "bits" that have to be transmitted for each stereo signal.

The tests are sponsored by private and public broadcasters as well as the federal Department of Communications, the body that allocates radio frequencies and would be in charge of the switch to digital.

The demonstration is currently being held in Toronto and will move to Montreal and Vancouver. Digital radio can be heard only at demonstration sites and on a special minibus equipped with receivers.

The sound appears to be better than that of even the clearest FM broadcast. Gone is the "noise floor," the hiss in the background, and "multipath" interference, distortion that occurs when the signals of other stations are reflected by large objects.

Technicians promise no fading in valleys or mountains or interference from electrical sources such as bus or streetcar wires.

In digital radio, the data being transmitted are split into 16 different frequency carriers where there now is one, meaning that if one or two carriers are distorted by interference the computer in the radio can compensate, picking up a continuously clear signal.

The crucial question surrounding the technology is whether there will be room for digital radio on a broadcasting spectrum already crowded with cellular telephones, television, remote control switchers and other devices.

The World Administrative Radio Council, which governs radio communications, has announced that the issue of frequency bands for digital broadcasting would be part of a conference on radio communications in Spain in 1992.

CYPRUS

Digital Cable Connection With Greece Discussed

NC1008044690 Nicosia *CYPRUS MAIL* in English
9 Aug 90 p 2

[Text] The Minister of Communications and Works Mr. Pavlos Savvidhis has discussed in Athens the question of a digital cable connection between Cyprus and Greece with optic fibres to improve the island's telecommunications system.

During his talks in Athens with the Minister of Transport and Communications in the presence of Cyprus Telecommunications Authority officials the possibility was also discussed of connecting the new cable with the projected launching of a submarine SEAMEWE2 network in which 35 countries in Europe, the Middle East and the Far East will be involved.

Connection of Cyprus with the SEAMEWE2 network will give another boost to the island's long term project of becoming a telecommunications centre in the Eastern Mediterranean.